

Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) A solid oxide fuel cell stack comprising a plurality of adjoining fuel cells, wherein the fuel cells are mutually sealed in a gas-tight manner by a seal formed of: A seal for use in a high temperature fuel cell comprising:
 ceramic fibres providing a matrix for retaining ceramic powder, and being capable of remaining flexible at operating temperatures of the fuel cell;
 ceramic powder being disposed within the matrix, a substantial proportion of the ceramic powder having a particle size of about 5 µm in diameter;
 the ceramic fibres and powder being capable of resisting sintering at operating temperatures of the fuel cell, ~~wherein the fibres and powder provide direct ceramic to ceramic contact, and~~ wherein the seal is substantially free of binder and has a fired porosity between about 35% to about 60%.
2. (Cancelled)
3. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 1 wherein the ceramic fibres and ceramic powder may be the same material or different and may comprise alumina or zirconia.
4. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 3 wherein the seal has a pre-fired porosity of less than about 45%.
5. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 4 wherein the seal has a pre-fired porosity of less than about 40%.

6. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 5 wherein the seal has a pre-fired porosity of about 35%.
7. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 1 or claims 3 to 6 which is formed by a tape casting process.
8. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 7 which has a fired porosity of less than about 50% and greater than about 35%.
9. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 8 which has a fired porosity of less than about 45% and greater than about 35%.
10. (Currently amended) The ~~seal~~ solid oxide fuel cell stack of claim 9 which has a fired porosity of less than about 40% and greater than about 35%.

Claim 11. (Cancelled)

12. (New) A composition for forming a gas seal against adjoining fuel cells in a solid oxide fuel cell stack comprising:
 - ceramic fibres providing a matrix for retaining ceramic powder, and being capable of remaining flexible at operating temperatures of the fuel cell, and in an amount between about 5% to about 40% by weight;
 - ceramic powder being disposed within the matrix, a substantial proportion of the ceramic powder having a particle size of about 5 μm in diameter; and in an amount between about 50% to about 90% by weight;
 - the ceramic fibres and powder being capable of resisting sintering at operating temperatures of the fuel cell, wherein the seal is substantially free of binder and has a fired porosity between about 35% to about 60%;
 - a plasticizer in an amount between about 1% to about 15% by weight;

an organic binder in an amount between about 2% to about 5% by weight;
a dispersant in an amount greater than about 1% by weight; and
a solvent.